

**Analysis of Proposed Amended New Source Review Rules for
Compliance with California Health & Safety Code §§ 42500 et seq. (Senate Bill 288)**

Introduction

The California Health and Safety Code Section 42500 et seq. (Senate Bill (SB) 288) prohibits California air districts from changing their New Source Review (NSR) program requirements in ways that would make them less stringent than the rules that existed on December 30, 2002. For the San Diego County Air Pollution Control District's (District) NSR Rules 20.1, 20.2, 20.3, 20.4, and 20.6, this would mean the version of the rules adopted November 4, 1998, effective December 17, 1998. The District is proposing amendments to its NSR rules to incorporate current, applicable state and federal NSR requirements and to replace outdated rules approved into the State Implementation Plan (SIP) in 1979. The great majority of the proposed amendments will clearly not make the 1998 District NSR rule requirements less stringent and thus did not merit further evaluation, as determined by the District in collaboration with staff of the California Air Resources Board (CARB). However, two proposed amendments to District Rule 20.4, which applies to portable emission units required to obtain an operating permit from the District, merited evaluation for their impact on the rule's stringency.

Specifically, the District is proposing that the lowest achievable emission rate (LAER) and emission offset requirements of Rule 20.4 – which currently apply to all new, modified and replacement portable units that would operate at a major source of volatile organic compounds (VOC) or oxides of nitrogen (NOx) emissions – be revised to add an exemption from LAER and emission offsets for portable emission units that are not related to the primary activities of the stationary source at which it is temporarily located. CARB staff requested that the District investigate whether such a change will result in any foregone emission reductions. If so, the District could be obligated under SB 288 to mitigate foregone emission reductions with comparable reductions from other sources.

Conclusions

The proposed amendments to Rule 20.4 would not result in any weakening of NSR rule requirements or any foregone emission reductions in the future. The proposed amendments to Rule 20.4, which would exempt portable emission units from LAER and emission offsets when such units are not related to the primary function of the stationary source at which they are located, are not expected to result in any foregone emission reductions. The District compiled a summary of permit actions involving portable emission units over a 12-year period through 2013. Only 15 portable emission unit permit actions over the 12-year study period (of approximately 2,250 portable unit permit actions in total) were required to comply with LAER requirements and provide emission offsets under current Rule 20.4. All of these 15 permit actions were for operations that were related to the primary functions (marine vessel construction, repair, and maintenance) of the major stationary sources of VOC emissions at which they would be located. Based on this result, the District concluded that amending Rule 20.4 to exempt portable emission units from LAER and emission offset requirements if the units were not related to the primary function of the VOC or NOx major stationary source at which

they might be located would not result in any weakening of NSR rule requirements or foregone emission reductions in the future. Instead, these amendments will help to simplify the application of Rule 20.4 in the future, and bring the District's requirements for permitted portable equipment more in line with those of other California air districts¹.

Discussion

From a total of approximately 2,250 permit actions involving portable emission units over a 12-year period, 160 actions were reviewed in detail. The remainder of the permit actions could be eliminated because they were administrative in nature (primarily retirement of permits – likely in favor of registration under the CARB-administered Portable Equipment Registration Program) or involved types of portable equipment that would not have emitted VOC or NOx. Neither category would have triggered emission offsets under current Rule 20.4. Of the 160 permit actions reviewed in detail, 145 permit actions did not trigger LAER or emission offset requirements. These 145 permit actions were all approved as "Type I" portable permit units, meaning they were not expected to operate at a major source of VOC or NOx emissions, and accepted conditions prohibiting such operations without first obtaining emission offsets

All of the remaining 15 permit actions (less than one percent of the total 2,250 actions) that triggered LAER and emission offsets under Rule 20.4 involved portable marine vessel painting and marine adhesives operations that were expected to operate, temporarily and periodically, at marine vessel construction, repair, and maintenance facilities. Some of those facilities are major stationary sources of VOC emissions. All 15 permit actions complied with emission offset requirements by acquiring and surrendering to the District emission reduction credits owned by other entities and previously approved in the District's Emission Reduction Credit bank. All were found to be employing emission reduction measures that met the requirements of Rule 20.4 (LAER, or BACT if under LAER exceptions allowed by current Rule 20.4). All 15 of these portable emission unit permit actions were for operations that were related to the primary operations (marine vessel construction, repair, and maintenance) of the major stationary sources of VOC emissions at which they would be located.

Based on this result, the District concluded that amending Rule 20.4 to exempt portable emission units not related to the primary function of a major stationary source at which they might be located from LAER and emission offset requirements would not result in any foregone emission reductions in the future.

It should be noted that other proposed amendments to NSR Rules 20.1-20.4 could result in more stringent emission offset requirements for new and modified federal major stationary sources of VOC or NOx emissions. These include a new requirement to meet a federal mandate that new and previously banked emission reduction credits be adjusted to reflect any applicable federal emission reduction requirements at the time the credits are to be used as emission offsets. This could result in the need for a greater amount of emission offsets than under the current District NSR rules. In addition, under proposed amended Rule 20.1, when an emission unit at a federal

¹ Several California air districts require emission offsets for portable equipment if related to, part of, or in support of the primary activities of a stationary source and/or if the emissions increase from the portable equipment is itself above emission offset trigger levels.

major stationary source is to be modified, the past actual emissions of the unit must be adjusted to reflect current applicable federal requirements before determining the amount of the emissions increase from the modification. This also can increase the amount of emission offsets required for a project.

Overall, the proposed amendments to the NSR Rules 20.1-20.4 will not result in a less stringent emission offset or new source review program.

SB 288 Compliance Analysis

Health and Safety Code Section 42504(a) prohibits amendment of an air district's new source review rules if the revisions will be less stringent than the rules that existed on December 30, 2002.

Proposed amended NSR Rules 20.1, 20.2, 20.3, and 20.4 will not be less stringent than the District's 1998 NSR rules, which were in effect on December 30, 2002. The proposed amended rules contain a number of revised and new elements that are expected to be more stringent than current requirements, but only two elements that could potentially be less stringent depending upon the types and sizes of proposed new and modified emission units for which permit applications will be submitted in the future. More specifically, the following amendments are expected to be more stringent than the current rules:

- Deleting an existing exemption from NO_x emission offsets for new, modified or replacement electrical generating units subject to and in compliance with the District Rule 69 utility-wide NO_x emissions cap.
- Adding a new restriction to an existing exemption from NSR requirements for piston engines used at military base airplane runways to hoist cable to capture errant aircraft. The exemption will not apply to new, modified, relocated, or replacement engine emission units that constitute a new federal major stationary source or federal major modification.
- All air quality impact analyses (not just analyses for Prevention of Significant Deterioration (PSD) level projects under the current rules) must be based on stack heights not exceeding good engineering practice stack height, as newly defined.
- New air quality increments for fine particulate matter (PM_{2.5}) are added, with requirements that they not be exceeded.
- Air quality impact analyses must now include area fugitive emissions of particulate matter (PM₁₀) in all cases. Under the current NSR rules, such emissions are excluded unless the District determines that including them is necessary to protect public health and welfare.
- The provisions for applying Best Available Control Technology (BACT) to modified emission units have been made slightly more stringent.
- The District can now require that projects with multiple similar emission units be evaluated for project BACT, in addition to the current required unit-specific BACT, and can now require such project BACT if cost-effective, technologically feasible, and lower-

emitting than unit-specific BACT. This also will apply for projects subject to federal LAER requirements.

- Deleting provisions that made it possible for certain essential public service projects to obtain emission offsets from a District emission reduction bank.
- Potentially more stringent, additional emissions increase calculation methodologies and emission offset requirements for new federal major stationary sources and federal major modifications, as newly defined.
- New major stationary source and major modification emission triggers based on fine particulate (PM_{2.5}) emission increase levels, having the potential to bring more future projects under major source new source review requirements.
- A requirement that permit-exempt unit emissions be included in the determination of the aggregate potential of a stationary source if such emissions would be determining as to whether the stationary source is a federal major stationary source. The current NSR rules do not require inclusion of such emissions unless unit emissions exceed five pounds per day or 25 pounds per week. The revised rules could possibly bring more facilities under federal major stationary source requirements.
- Inclusion of the potential to emit of portable emission units in the aggregate potential to emit of a host stationary source, where the portable emission units have the same two-digit SIC classification code or where such units are used as part of, or to supplement, a primary process at the stationary source. Under the current NSR rules, in no case are the emissions of portable emission units included in the aggregate potential to emit of the host stationary source. This change could potentially subject additional facilities to major stationary source NSR requirements.
- A new restriction on the exemption from emission offsets in the current NSR rules for air contaminant emission control projects. The new restriction would exclude from exemption emission increases that would constitute a new federal major stationary source or federal major modification.
- Expansion of emission offset requirements beyond the current requirements applicable to only VOC and NOx emission increases, to include any air contaminant (or its precursors) for which the San Diego air basin has been designated by the U.S. Environmental Protection Agency as nonattainment of a national ambient air quality standard.
- A new requirement that any new federal major stationary source or federal major modification conduct an analysis of visibility impairment in Class I areas (federally protected national parks and wilderness areas). Potentially, this new requirement could cause some projects to further reduce emissions or obtain offsetting emission reductions to mitigate adverse visibility impacts.

The only two NSR rule amendments that required additional evaluation to determine if they could result in a less stringent application of NSR requirements both affect portable emission units. Proposed amended Rule 20.4 would include two new exemptions, only applicable to new, modified, or replacement portable emission units where emissions (of VOC or NOx) are increasing but whose operations are not related to the primary function of the major stationary source (for VOC or NOx) at which they are located:

- Rule 20.4(b)(3) would exempt such portable units from emission offset requirements.

- Rule 20.4(d)(1)(ii)(B) would exempt such portable units from LAER, although BACT would still apply.

As described above, a review of approximately 2,250 portable emission unit permit actions over a 12-year period found that only 15 units were required to provide emission offsets and all 15 were portable units whose operations were related to the primary functions of the major stationary sources (for VOC) at which they could be expected to locate. These same units would have also been subject to current Rule 20.4 LAER requirements and either applied LAER or complied with the use of BACT under exceptions allowed in current Rule 20.4. These current Rule 20.4 requirements would not be affected by the new exemptions in amended Rule 20.4.

It can thus be seen that the proposed amended NSR Rules 20.1-20.4 and 20.6 are not less stringent and in fact will be more stringent than the current 1998 NSR Rules 20.1-20.4 and 20.6.

SB 288 also prescribes four specific NSR rule elements that cannot be revised if the result would be to exempt, relax, or reduce the obligations of a stationary source. The four elements are:

- The sources to which the NSR rules apply.
- The definitions of "modification," "major modification," "routine maintenance," and "repair and replacement."
- The calculation methodology, thresholds or other procedures of new source review.
- The definitions and requirements of NSR regulations.

Health and Safety Code Section 42504(b) precludes an air district from revising the above four elements of its NSR rules if doing so would exempt, relax, or reduce the obligations of a source with regard to the following requirements:

- (1) Any requirement to get a permit prior to construction.
- (2) Any requirement to apply BACT or LAER.
- (3) Any requirement to perform an air quality impact analysis.
- (4) Any requirement for monitoring, recordkeeping, and reporting if these would be less representative, enforceable, or publicly accessible.
- (5) Any requirement for regulating any air pollutant covered by the NSR rules.
- (6) Any requirement for public participation prior to permit issuance.

Health and Safety Code Section 42504(c) allows amendments to the above requirements if they make the rules more stringent.

Only two of the proposed amendments to the District's NSR Rules 20.1-20.4 and 20.6 would revise any of the above four elements in a manner that, hypothetically, would exempt, relax or reduce the obligations of a stationary source under the District's NSR program. Specifically, the proposed amendments to Rule 20.4 would create two new exemptions for portable emission units:

- Rule 20.4(b)(3) would exempt certain portable units from emission offset requirements.

- Rule 20.4(d)(1)(ii)(B) would exempt such portable units from LAER, although BACT would still apply.

These two amendments effectively create narrow exemptions that would apply to only new, modified, or replacement portable emission units that:

- Emit VOC or NO_x;
- Are expected to operate at an existing major stationary source of VOC or NO_x, on an air-contaminant-specific basis; and,
- Are not related to the primary activities of the stationary source. A definition of the new term "related to the primary activities of the stationary source" is included in the proposed amendments to Rule 20.4.

As described above, a review of approximately 2,250 District permit actions involving portable emission units over a 12-year period found only 15 actions that triggered LAER and emission offset requirements under current Rule 20.4. All were for portable emission units whose operations would be related to the primary functions of the stationary source. Future permit actions for such operations would continue to apply the emission offset and LAER requirements of Rule 20.4. Therefore, the proposed amendments to Rule 20.4 are not expected to result in the relaxation of requirements for portable emission units as a practical matter. It is worth noting that far fewer portable emission unit operations are regulated under the District's permit program since the implementation of the statewide Portable Equipment Registration Program administered by CARB.

Health and Safety Code Section 42504(d) prescribes the process required for adoption of NSR rule revisions, which are less stringent than the existing District NSR rules. Such amendments must be accomplished at a public hearing based upon substantial evidence in the record, and must be approved by the CARB at a public hearing.

As discussed above, the large majority of the amendments to the District's NSR rules can only be viewed as being more stringent. The only two amendments (applicable to Rule 20.4 – Portable Emission Units) that might be viewed as hypothetically less stringent have been demonstrated above as having, as a practical matter, no effect on permit actions taken by the District and thus will not result in less stringent NSR rules. Therefore, the process described in Section 42504(d) does not apply to the District's proposed update of its NSR rules.